

# ***Response to September COD Questions***

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Council Of Deans Meeting  
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## ***Action Items from September COD Meeting***

- **Request Office of Education presentation at next meeting**
- **Request details on direction of fuel efficiency research (Dean Cecchi)**
- **What portion of the Aeronautics university investment was Congressional Earmarks? (Dean Fuchs)**
- **Request NASA assess URETI from a unified agency level and decide whether to continue or re-compete them. (Dean Haritos)**
  - **Worth NASA Investment?**
  - **Should URETI mechanism continue?**
  - **How to engage entire academic community in future URETI?**
- **Look at the DOD Multidisciplinary University Research Initiative (MURI) as a possible model for NASA university research solicitation (Dean Katehi)**

## ***Office of Education Briefing***

- Briefing accomplished at this meeting
- Was it adequate?

## ***Fuel Efficiency Research Direction***

- Vehicle Systems Program (VSP) is transforming to focus on 4 Demonstrators
  - Supersonic boom reduction
  - High-Altitude Long-Endurance Remotely-Operated Aircraft (HALE ROA)
  - Aircraft subsystems noise reduction
  - Zero Emissions Transport Aircraft
  - VSP briefing will be scheduled for future COD meeting
- Fuel efficiency was a major focus of NASA research for many years
  - Major accomplishments in engine efficiency, aerodynamic efficiency, operating efficiency and others
  - Reduced VSP budget requires focus on fewer objectives
    - Some technologies for reducing emissions counter to fuel efficiency
  - Rely on industry for fuel efficiency research
- Welcome COD discussion and recommendations

## ***Congressional Earmarks***

- Of the FY04 ARMD university investment, 9.3% was for congressional earmarks
  - Total FY04 ARMD university investment \$106M
  - Earmarks \$9.87M

## ***URETI Assessment***

- Five of seven URETI assessed by Rediess
  - Center personal involved believe they are very effective and worth the investment
    - URETI focuses significant, high quality university research on NASA Mission and specific programs - strong NASA researcher involvement
    - Consortium universities are collaborating and leverage other research
    - Glenn Research Center strong supporter of Aeropropulsion and Power URETI
    - Ames and Langley strong supporters of their URETI (nano-bio-technology)
  - Vehicle Systems Program Director believes individual grants more effective
    - \$3M/year for one URETI = 15 \$200K grants
  - Exploration Systems Mission Directorate would like to discontinue their 6 URETI
    - Unlikely to exercise second 5-year option
    - Redirect funding to exploration mission focused research
  - Concerned about credibility with academic community if URETI canceled early
  - Mixed opinion in ARMD about URETI as a mechanism
    - Program Directors concerned about long-term research, like URETI
    - Two of the three Program Directors willing to consider URETI, if concerns resolved
    - General opinion is that there needs to be a balance between “big” university consortia and individual institution grants
  - URETI and other mechanisms will be considered in ARMD university strategy
    - Full and open competition for the entire university community

## ***DOD Multidisciplinary University Research Initiative (MURI)***

- MURI vs URETI
  - MURI has bigger funding base (~\$18M - \$30M/yr), so can make more awards
    - Covers broader range of technical areas ~ 30 grants/yr
    - Three to five years duration
    - Good track record of funding commitment
  - MURI is an annual solicitation, URETI was one-time solicitation
    - Academic community knows when and where to look for MURI solicitation
  - MURI research monitored from sponsoring office, e.g., AFOSR, ONR, etc.
  - URETI managed at NASA Research Centers by researchers
    - Some NASA researchers collaborate with URETI researchers
  - Both invite other agencies to be involved
    - NASA participates in MURI proposal evaluations
    - AFOSR co-funds and on Executive Board of Aeropropulsion and Power URETI
- Also looked at NSF Engineering Research Center (ERC) and FAA Centers of Excellence (COE) as models and collaborations
- URETI fitted NASA ARMD culture and budget better
  - Other models may work for transformed NASA
  - Welcome COD discussion and recommendations